BRUSH-FOOTED TRAPDOOR (*OZICRYPTA* SP.) BURROWS AND GECKOS AT WANDO VALE, NEQ.
Memoirs of the Queensland Museum 38(2):470. 1995:- Main (1993) saw burrow openings reinforced and raised above the surface and tightly fitting, thick plug-doors primarily as adaptations against flooding. Raven (1994) discounts this as a major force in the evolution of barychelid burrow structure.

Ozicrypta sp. (Mygalomorphae: Barychelidae) were dug from their burrows and the structures photographed and drawn (Fig. 1) and rejectamenta collected. QMS30177 was from the steep, stony loam bank of a small, dry gully, 1 m from gully floor; the others (QMS30179, QMS30182) were under logs in a broad, shallow gully floor in sandy loam (Fig. 2). All were subject to short-duration flooding of unknown frequency.

Main burrows were unlined, vertical and open, openings unadorned and flush with the surface; burrow diameters were c. 15mm; depths 100-150mm. Spiders were each found in the bottom third of the burrow in a parchment-silk-lined side-chamber with the outward-opening, side-hinged door a silk-lined plug of earth. The spiders held the doors with their front legs. The burrow of QMS30179 (Fig. 1B) had three side-chambers (i, near opening, unlined, with grasshopper remains; ii, (11mm diameter, 25mm long) also near opening, silk-lined with damaged door; iii, (18mm diameter, 28mm long) silk-lined, lid intact, occupied, in bottom third of burrow). These burrows differ from the lidded and silk-lined burrows of many *Ozicrypta* which are often buried in litter (Raven, 1994) but most resemble those of *Zophorame covacevichae*, *Trittame* and some *Idiommata* (Raven, 1994).

A Burrow-plug gecko, *Diplodactylus conspicillatus* was found at the bottom of the burrow of QMS30177 (Fig. 1A), below the trapdoor with tail curled above its head plugging the burrow. This posture is described in Ehmann (1992). Its use of spider burrows as a daytime shelter has been reported (Pianka & Pianka, 1976; Wilson & Knowles, 1988; Greer, 1989; Ehmann, 1992). None of these authors mention the spider being present. Although Greer (1989) believed all geckos to be opportunistic arthropod feeders, Pianka & Pianka (1976) cite termites as the gecko's sole diet and record another long-bodied termite specialist, *Rhynchoedura ornata*, also sheltering in spider burrows. No gecko remains are known in the rejectamenta of *Ozicrypta* spp. An association between spider and gecko is possible though the degree of mutual benefit is unknown. *D. conspicillatus* leaves the burrow in the first three hours of the evening to forage for termites (Pianka & Pianka, 1976). The position of the side-chamber door above the bottom would allow the spider access to the surface when the gecko is in. Nightly gecko traffic might also explain the absence of outer trapdoors and silk in the main burrows. It is unknown whether *Ozicrypta* awaits prey at the mouth of its underground side-chamber (Main's "pitfall capture"), at the burrow opening or leaves the burrow entirely. As the grasshopper remains are the spiders rejectementa, the spider must hunt at or beyond the burrow opening. Both size and behaviour of grasshoppers makes them unlikely candidates for pitfall capture.

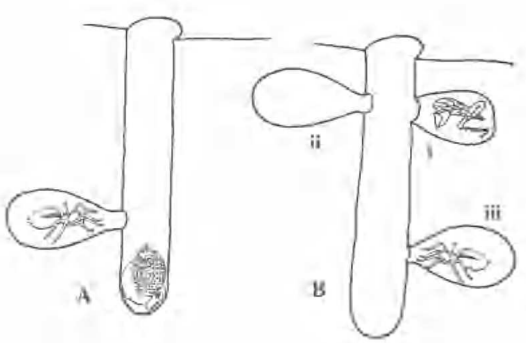

FIG. 1. Burrows of (A) QMS30177; (B) QMS30179 (i-iii, see text).

FIG. 2. Locality of QMS30179.

Material Examined

Ozicrypta sp.
QMS30177 penultimate ♂, Wando Vale stn, MEQ, 19°27.22'S, 144°45.67'E, open bloodwood forest on hills, 17.IX.1995, P.Lawless, A.Cook, C.McHenry. QMS30179 immature, Wando Vale stn, 19°32.96'S, 144°40.03'E, open woodland, Narrow-leaf Ironbark, sandy loam, 11.VII.1995, P.Lawless, A.Cook, N.Camilleri. QMS30182 penultimate ♂, same data. Orthopteroid rejectamenta:- pronotum: 7.5mm long, 6.5mm high; forewings: 28mm long, 5mm high; tibia: 12mm long and femur (part).

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